

**Table A3.1.—Equations for earned degrees conferred**

| Dependent Variable                  | Equation  | R <sup>2</sup> | Durbin-Watson statistic <sup>1</sup> | Estimation technique <sup>2</sup> | Rho            | Time period           |
|-------------------------------------|---|----------------|--------------------------------------|-----------------------------------|----------------|-----------------------|
| Associate's degrees                 | ASSOCM = 108,173 + 55.7UGFT2M + 37.0UGPT2M<br>(1.5) (2.2)   | 0.81           | 1.6                                  | AR1                               | 0.69<br>(4.1)  | 1970-71 to<br>1997-98 |
| Associate's degrees<br>Women        | ASSOCW = 83,441 + 194.0UGFT2W<br>(6.2)                      | 0.99           | 1.5                                  | AR1                               | 0.98<br>(39.0) | 1970-71 to<br>1997-98 |
| Bachelor's degrees<br>Men           | BACHM = 251,901 - 10.8P1824M + 168.4UGFT4M<br>(-3.4) (5.6)  | 0.88           | 1.7                                  | AR1                               | 0.63<br>(3.9)  | 1970-71 to<br>1997-98 |
| Bachelor's degrees<br>Women         | BACHW = 248,513 - 18.3P1824W + 233.9UGFT4W<br>(-4.7) (21.7) | 0.99           | 1.2                                  | AR1                               | 0.68<br>(4.7)  | 1970-71 to<br>1997-98 |
| Master's degrees<br>Men             | MASTM = 34,533 + 405.9GFTM<br>(4.5)                         | 0.92           | 1.3                                  | AR1                               | 0.89<br>(11.2) | 1970-71 to<br>1997-98 |
| Master's degrees<br>Women           | MASTW = 38,964 + 530.5GFTW<br>(13.2)                        | 0.99           | 1.1                                  | AR1                               | 0.91<br>(13.2) | 1972-73 to<br>1997-98 |
| Doctor's degrees<br>Men             | DOCM = 18,405 + 26.5GFTM1 - 2,796.3RUC<br>(1.6) (-0.2)      | 0.91           | 1.1                                  | AR1                               | 0.96<br>(24.2) | 1970-71 to<br>1997-98 |
| Doctor's degrees<br>Women           | DOCW = - 1,632 + 0.3P3544W + 35.6GFTW<br>(2.4) (5.8)        | 0.99           | 2.2                                  | AR1                               | 0.70<br>(3.8)  | 1972-73 to<br>1997-98 |
| First professional degrees<br>Men   | FPROM = 10,572 + 228.0FPFTM<br>(7.1)                        | 0.87           | 1.9                                  | AR1                               | 0.48<br>(2.4)  | 1970-71 to<br>1997-98 |
| First professional degrees<br>Women | FPROW = - 1,257 + 288.9FPFTW + 201.5FPPTW<br>(22.2) (1.9)   | 0.99           | 1.5                                  | OLS                               |                | 1971-72 to<br>1997-98 |

<sup>1</sup>For an explanation of the Durbin-Watson statistic, see J. Johnston, *Econometric Methods*, New York: McGraw-Hill, 1972, pages 251-252.

<sup>2</sup>AR1 indicates an estimation procedure for correcting the problem of first-order autocorrelation. OLS indicates Ordinary Least Squares. For a general discussion of the problem of autocorrelation, and the method used to forecast in the presence of autocorrelation, see G. Judge, W. Hill, R. Griffiths, H. Lutkepohl, and T. Lee, *The Theory and Practice of Econometrics*, New York: John Wiley and Sons, 1985, pages 315-318.

**Where:**

- ASSOCM = Number of associate's degrees awarded to men
- ASSOCW = Number of associate's degrees awarded to women
- BACHM = Number of bachelor's degrees awarded to men
- BACHW = Number of bachelor's degrees awarded to women
- MASTM = Number of master's degrees awarded to men
- MASTW = Number of master's degrees awarded to women
- DOCM = Number of doctor's degrees awarded to men
- DOCW = Number of doctor's degrees awarded to women
- FPROM = Number of first-professional degrees awarded to men
- FPROW = Number of first-professional degrees awarded to women
- UGFT2M = Full-time male undergraduate enrollment in 2-year institutions, lagged 2 years, in thousand
- UGPT2M = Part-time male undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands
- UGFT2W = Full-time female undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands
- P1824M = Population of 18- to 24-year-old men, in thousands
- P1824W = Population of 18- to 24-year-old women, in thousands
- UGFT4M = Full-time male undergraduate enrollment in 4-year institutions, lagged 2 years, in thousands
- UGFT4W = Full-time female undergraduate enrollment in 4-year institutions, lagged 3 years, in thousands
- GFTM = Full-time male graduate enrollment, in thousands
- GFTW = Full-time female graduate enrollment, in thousands
- P3544W = Population of 35- to 44-year-old women, in thousands
- GFTM1 = Full-time male graduate enrollment lagged one year, in thousands
- GFTW = Full-time female graduate enrollment, in thousands
- RUC = Unemployment rate
- FPFTM = Full-time male first-professional enrollment lagged 2 years, in thousands
- FPFTW = Full-time female first-professional enrollment lagged 1 year, in thousands
- FPPTW = Part-time female first-professional enrollment lagged 2 years, in thousands

NOTE: R<sup>2</sup> indicates the coefficient of determination. Numbers in parentheses are t-statistics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred Model.

(This table was prepared June 2001.)